

The chemical structure represents a poly(amide-imine) polymer. The main chain consists of repeating units connected by amide and imine bonds. The structure is highly branched and includes several functional groups and labels:

- Amide groups:** NH-CO linkages are present throughout the chain.
- Imine groups:** C=N linkages are also present, connecting different parts of the polymer.
- Substituents:**
 - Phenyl groups:** C_6H_5 groups are attached to various carbon atoms in the chain.
 - Carboxylate groups:** COO^- groups are present, some of which are associated with NH_3^+ counterions.
 - Hydroxyl groups:** OH groups are attached to some of the carbon atoms.
- Labels:**
 - L:** Located near the top left, pointing to a specific part of the chain.
 - D:** Located near the top center, pointing to another part of the chain.
 - K:** Located near the bottom left, pointing to a third part of the chain.
- Counterions:** NH_3^+ ions are shown as counterions for the carboxylate groups.

The structure is a complex, branched polymer with multiple amide and imine linkages, and various substituents including phenyl, carboxylate, and hydroxyl groups. The labels L, D, and K indicate specific regions or functional groups within the polymer structure.

Figure 2

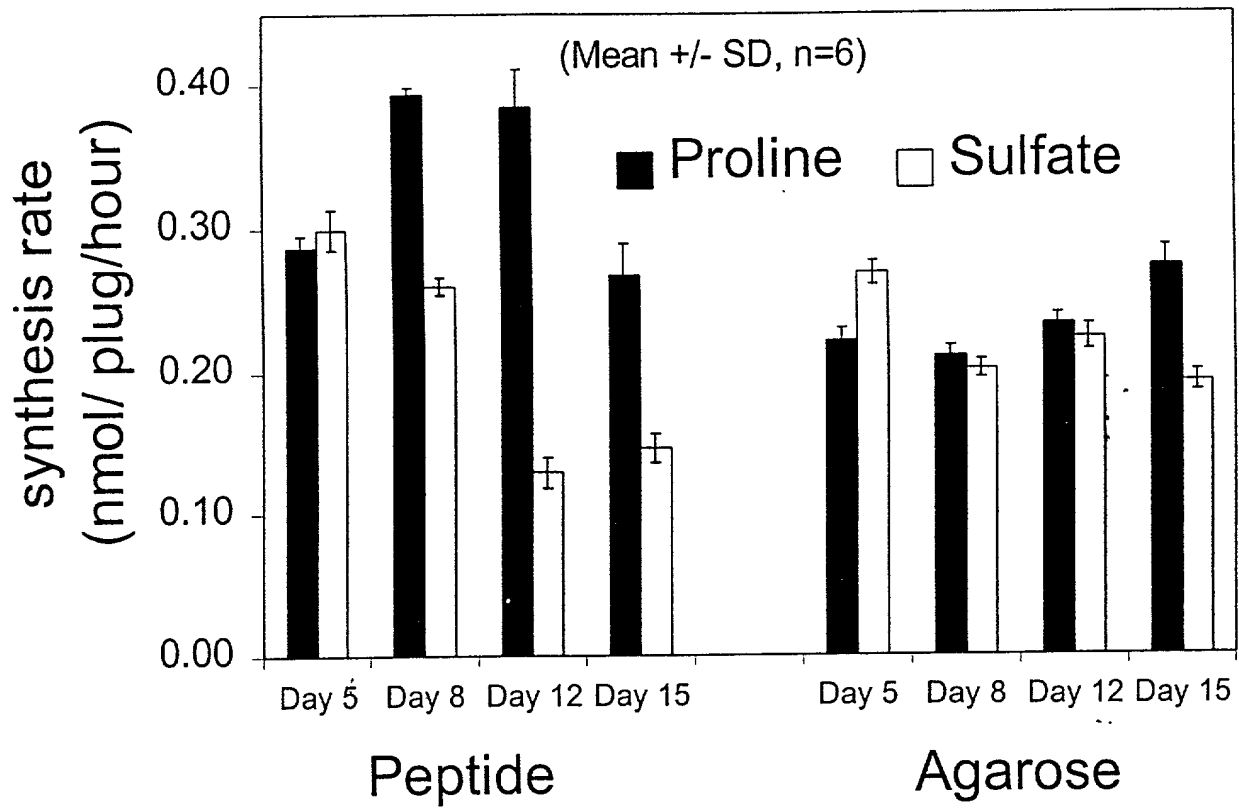


Figure 3

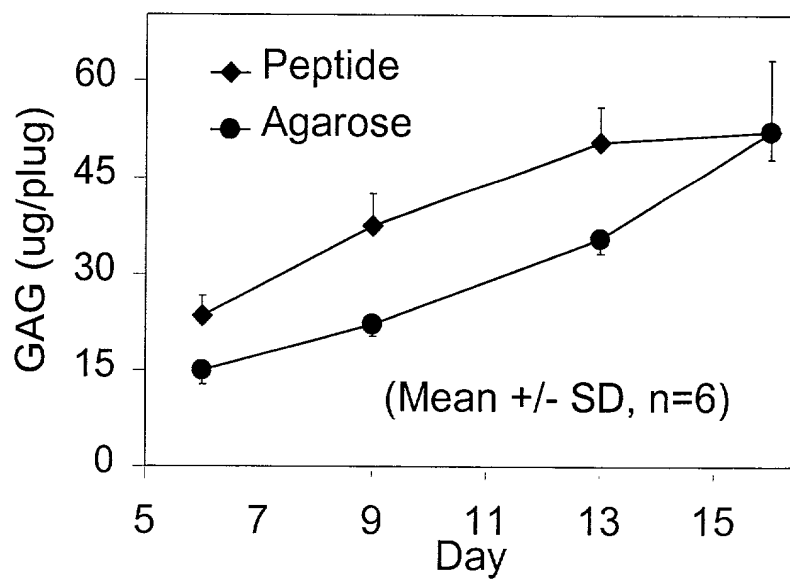


Figure 4

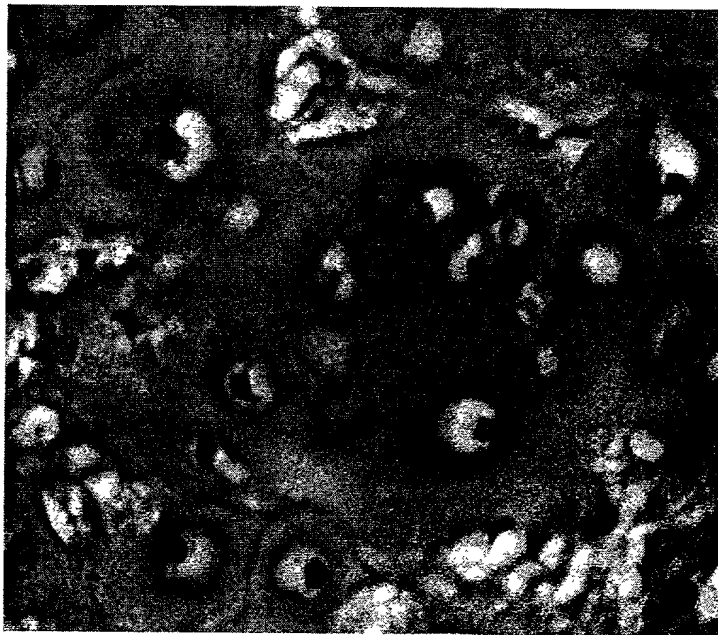


Figure 4

Figure 5

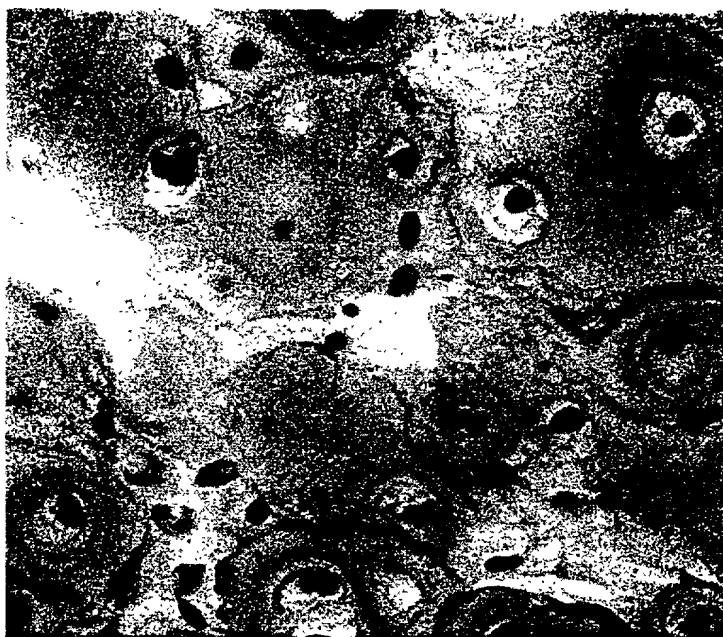


Figure 6

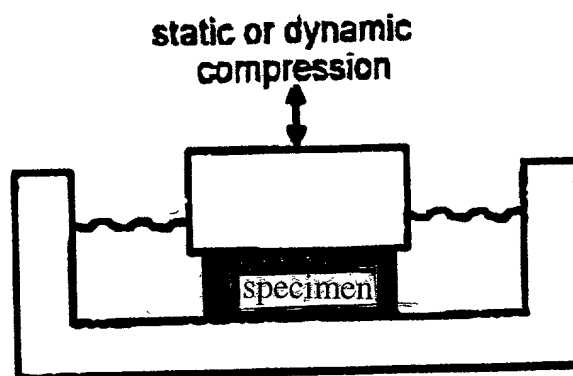


Figure 7

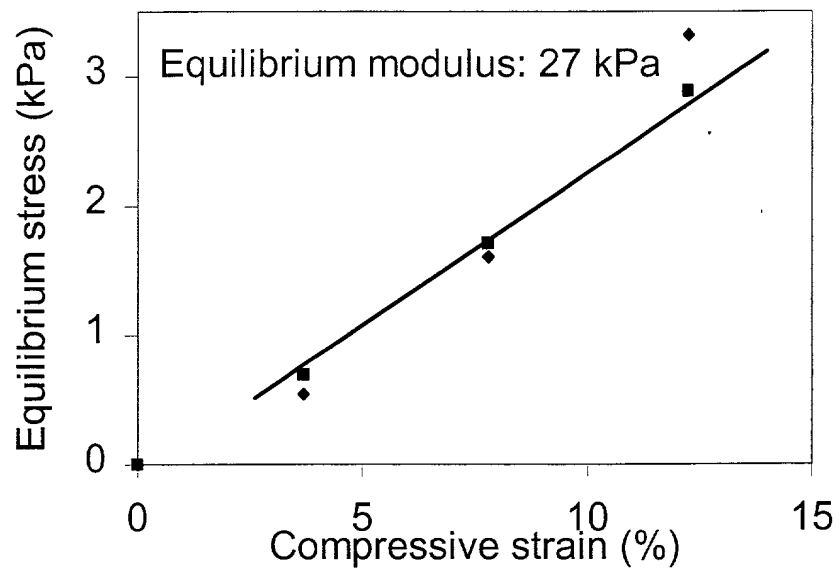


Figure 8



Figure 9 A



Figure 9 B

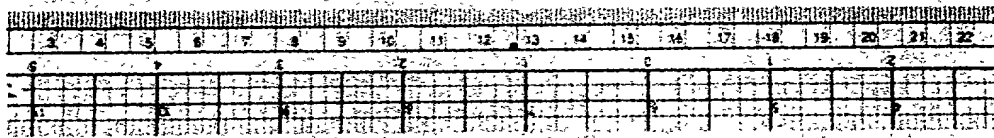


Figure 9 C

